

App. No. 09/930,659
Amendment Dated March 20, 2006
Reply to Office Action of December 21, 2005

Listing of claims:

1. (Currently amended) A computer-readable medium having a data structure stored thereon for synchronizing an object between a server and a client, the data structure comprising:

a synchronization message including message portions for grouping synchronization request activities and synchronization response activities in a single message, wherein the synchronization request activities include commands to update data and the synchronization response activities include responses to previous commands to update data, wherein the message portions include:

a version portion of the synchronization message for indicating a protocol version of the synchronization message for synchronizing the object;

a command portion of the synchronization message for indicating a synchronization action to synchronize the object between the server and the client; and

a response portion of the synchronization message for indicating a synchronization action error.

2. (Previously presented) The computer-readable medium of claim 1, wherein the command portion includes a fetch portion for identifying an object to be synchronized.

3. (Previously presented) The computer-readable medium of claim 2, wherein the fetch portion indicates that the object is the only object to be synchronized.

4. (Previously presented) The computer-readable medium of claim 1, wherein the command portion includes a window size portion for indicating a maximum number of objects to synchronize.

5. (Previously presented) The computer-readable medium of claim 1, wherein the command portion includes a more available portion for indicating that more objects are available to synchronize.

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6. (Previously presented) The computer-readable medium of claim 1, further comprising an options portion that includes a second synchronization message.

7. (Previously presented) The computer-readable medium of claim 6, wherein the second synchronization message is configurable to send a second set of commands between the client and the server.

8. (Previously presented) The computer-readable medium of claim 6, wherein the second synchronization message is configurable to send data between the client and the server.

9. (Previously presented) The computer-readable medium of claim 1, further comprising a get changes portion that requests the server to send updates to the client.

10. (Previously presented) The computer-readable medium of claim 1, further comprising a response portion that includes a server ID that the server associated with the object when the client sends an object for addition to the server.

11. (Previously presented) The computer-readable medium of claim 10, wherein the response portion includes a client ID that the client sent with the object.

12. (Previously presented) The computer-readable medium of claim 1, wherein the object is associated with more objects to be synchronized.

13. (Previously presented) The computer-readable medium of claim 1, wherein the synchronization message is grouped with a second synchronization message to form the single message.

14. (Previously presented) The computer-readable medium of claim 1, wherein the synchronization message is associated with an email.

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15. (Previously presented) The computer-readable medium of claim 1, wherein the synchronization message is transmitted using a hypertext transport protocol.

16. (Previously presented) The computer-readable medium of claim 1, wherein the command portion includes an object data portion having object update data.

17. (Previously presented) The computer-readable medium of claim 1, further comprising a status portion for indicating a status of the synchronization action.

18. (Previously presented) The computer-readable medium of claim 1, wherein the synchronization message further comprises:
a second command portion for indicating a second synchronization action to synchronize a second object between the server and the client; and
a second response portion for indicating that the second synchronization action was unsuccessful when an error occurs.

19. (Previously presented) The computer-readable medium of claim 18, wherein the synchronization message further comprises an information response portion that includes requested information when the client requests information from the server.

20. (Previously presented) The computer-readable medium of claim 1, wherein the synchronization message further comprises an information response portion that includes requested information when the client requests information.

21. (Currently amended) A system for synchronizing an object, comprising:
a server configured to receive a synchronization message from a mobile device, wherein the synchronization message includes portions for grouping synchronization request activities and synchronization response activities in a single synchronization message, wherein the synchronization request activities include commands to update data and the synchronization response activities include responses to previous commands to update data, wherein the portions include:

a version portion of the synchronization message for indicating a version of the synchronization message for synchronizing the object;

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a command portion of the synchronization message for indicating a synchronization action to take to synchronize the object; and

~~a mobile device associated with the server, wherein the mobile device is configured to send the synchronization message to the server to synchronize the object.~~

22. (Previously presented) The system of claim 21, wherein the server is configured to send a second synchronization message having:

a second version portion of the second synchronization message for indicating a version of the second synchronization message for synchronizing the object;

a response portion for indicating an error when an error is associated with the synchronization action.

23. (Previously presented) The system of claim 22, wherein the response portion is omitted from the synchronization message when an error is not associated with the synchronization action.

24. (Previously presented) The system of claim 22, wherein the second synchronization message further comprises an information response portion for requested information when the mobile device requests information.

25. (Previously presented) The system of claim 23, wherein the second synchronization message comprises a command portion for indicating a second synchronization action to synchronize a second object between the server and the mobile device.

26. (Previously presented) The system of claim 24, wherein the server is further configured to update data on a second server using the synchronization message.

27. (Previously presented) The system of claim 26, wherein the server is a proxy server.

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28. (Previously presented) The system of claim 27, wherein the proxy server associates an object on the mobile device with an object on the second server.

29. (Currently amended) A mobile device having a data store and computer-executable instructions, the computer-executable instructions, comprising:

formatting a synchronization message having message portions for grouping synchronization request activities and synchronization response activities in a single message, wherein the synchronization request activities include commands to update data and the synchronization response activities include responses to previous commands to update data, wherein the message portions include:

a version ID portion indicating a version of a synchronization protocol;

a commands portion defining server changes for causing data on the server to synchronize with data on the data store; and
transmitting the synchronization message to the server.

30. (Previously presented) The device of claim 29, wherein the synchronization message further includes a response portion for indicating the synchronization was unsuccessful when an error occurs.

31. (Previously presented) The device of claim 30, wherein the synchronization message further includes an information response portion that includes the requested information when the mobile device requests information.

32. (Previously presented) The device of claim 30, wherein the commands portion includes a fetch portion for identifying an object located on the server for updating the mobile device.

33. (Previously presented) The device of claim 30, wherein the commands portion includes a window size for indicating a maximum number of objects for the server to synchronize.

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34. (Currently amended) A server having a data store and computer-executable instructions, the computer-executable instructions, comprising:

receiving an update synchronization message having message portions for grouping synchronization request activities and synchronization response activities in a single message, wherein the synchronization request activities include first commands to update data and the synchronization response activities include responses to previous commands to update data, wherein the message portions include:

a first version ID portion for indicating a version of a synchronization protocol;

a first commands portion defining server changes for causing the data store to be synchronized with data on a mobile device;

sending a response synchronization message having message portions for grouping synchronization request activities and synchronization response activities in a single message, wherein the synchronization request activities include second commands to update data and the synchronization response activities include responses to the first commands to update data, wherein the message portions include:

a second version ID portion for indicating a version of a synchronization protocol;

a second commands portion defining mobile device changes for causing the data store to be synchronized with data on the mobile device; and

a response portion for indicating that synchronization was unsuccessful when an error occurs during processing of the update synchronization message.

35. (Previously presented) The server of claim 34, further comprising:
a parser for parsing the update synchronization message; and
a generator for generating the response synchronization message.

36. (Previously presented) The server of claim 35, wherein the update synchronization message and the response synchronization message include a markup language.

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37. (Previously presented) The server of claim 36, wherein the markup language includes an extensible markup language.